

CLAIMS

1. A billiard cue comprising a shaft having a tip end and a butt end, wherein the shaft has a non-linear tapered section with reduced diameter compared to a linear tapering at the tip end.

2. The billiard cue as in claim 1, wherein said non-linear tapered section with reduced diameter extends until about 14 inches from the tip end.

3. The billiard cue as in claim 1, wherein the shaft further has a non-linear tapered section with increased diameter from about 14 inches from the tip end to about 29 inches from the tip end.

4. The billiard cue as in claim 1, wherein the shaft shows an increased flexibility at the tip end compared to a linearly tapered shaft.

5. A billiard cue comprising a shaft having a tip end and a butt end, wherein the diameter of the shaft from the tip end is in a Boltzmann function relation to the distance from the tip end curve until at about half of the shaft.

6. A process for the manufacture of a shaft for a low-deflection billiard cue, comprising the steps of:

- Providing an elongated suitable material such as ash or maple wood,
- Reduce said material to obtain a tapered shaft comprising a tip end and a butt end, wherein said tapered shaft has a non-linear tapered section with reduced diameter compared to a linear tapering at the tip end.

7. The process of claim 1, wherein the step of reducing is executed with a technique selected from the group consisting of sanding, laser and manual or computer-directed lathe turning.